

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (**Currently Amended**) Regenerator of combustion exhaust gases (VG) comprising an hot operated exhaust gas catalytic converter (KAT), a high temperature resistant diffusion-membrane (MEM), and a reclaim collector (RS) ~~wherein the exhaust gas catalytic converter (KAT) adjoins~~ is adjacent to the diffusion-membrane (MEM) and the diffusion-membrane (MEM) adjoins to reclaim collector (RS), ~~where the exhaust gas catalytic converter (KAT) is hot operated and wherein the reclaim collector (RS) is held under a less~~ lower internal pressure (pr) than a respective pressure (pk) in the exhaust gas catalytic converter (KAT), ~~so that~~ that accumulating reclaim gas (RG) is fed from the reclaim collector (RS) into a combustion unit (COMB), upstream of the regenerator, as additional fuel, ~~and/or to be used otherwise chemo-energetically.~~

2. (**Currently Amended**) Regenerator according to claim ~~1~~ 21, ~~wherein~~ in the diffusion-membrane (MEM) consists of a high temperature-resistant micro porous open pored ceramic.

3. **(Currently Amended)** Regenerator according to claim 2, wherein the diffusion-membrane (MEM) consists of earthy base aluminates and/or silicates.

4. **(Currently Amended)** Regenerator according to claim 2, wherein the diffusion-membrane (MEM) consists of aluminium oxides and/or zirconium oxides.

5. **(Currently Amended)** Regenerator according to claim 1, wherein the diffusion-membrane (MEM) is held in a fitting mounting (E) in a casing (G) that is welded with a frame (R) on ~~a one of the~~ walls (W) of the catalytic converter (KAT).

6. **(Currently Amended)** Regenerator according to claim 5, wherein the diffusion-membrane (MEM) features an edge ~~(R)~~, tapering in the direction of the pressure gradient (pk, pr).

7. **(Currently Amended)** Regenerator according to claim 1, wherein the diffusion-membrane (MEM) is supported by a perforated sheet (B) on the side of the reclaim collector (RS).

8. **(Currently Amended)** Regenerator according to claim 5, wherein in at least one electric glow plug (GK) and/or fuel-supplied flame glow plug is/are inserted in the wall (W) or the frame (R) for the heating of the catalytic converter.

9. **(Currently Amended)** Regenerator according to claim 1, wherein in the catalytic converter (KAT) is equipped upstream and or downstream with one baffle plate (P1, P2), respectively.

10. **(Currently Amended)** Regenerator according to claim 1, wherein in the catalytic converter (KAT) contains at least one lamellated block, coated with a metal catalyst, which is perforated by lateral ducts (Q) that end near to the diffusion-membrane (MEM).

11. **(Currently Amended)** Regenerator according to claim 1, wherein in the catalytic converter (KAT) is encased in an high-temperature resistant insulating layer (WD).

Claims 12-20. **(Cancelled)**

21. **(New)** Regenerator for combustion exhaust gases comprising a hot operated exhaust gas catalytic converter, a high temperature

resistant diffusion membrane, and a reclaim collector, wherein the exhaust gas catalytic converter is adjacent to the diffusion membrane and the diffusion membrane is adjacent to the reclaim collector, and wherein the reclaim collector is held under a lower internal pressure than a respective pressure (p_k) in the exhaust gas catalytic converter, whereby accumulating reclaim gas (RG) is led from the reclaim collector into a combustion unit, upstream of the regenerator, wherein the reclaim gas is used as additional fuel or for producing other energy chemically.

22. **(New)** Regenerator according to claim 21, wherein a lambda probe (S) upstream of the catalytic converter is connected to a control device which controls the supply of air (L) and hydrocarbon fuel to a combustion unit .

23. **(New)** Regenerator according to claim 21, wherein a mounting plate is bolted by bolts with interlaying miceous gaskets consisting of a miceous sealing matter between the wall of the catalytic converter and the reclaim collector.

24. **(New)** Regenerator according to claim 23, wherein the diffusion membrane consists of multiple circular single membranes, each of said membranes framed with a high temperature resistant metal socket and inserted so as to be leak proof into a mounting plate.

25. **(New)** Regenerator according to claim 24, wherein the mounting plate consists of at least two high-grade steel plates with interlying gaskets and wherein the sockets are inserted by high pressure into the mounting plate.